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In 1965 the Florida State Legislature authorized the establishment of a new state university in Dade County. This report outlines various projections and preliminary plans for the institution. The 3 planning phases for the institution include first, the selection of a site for the first campus and construction of facilities; second, the development of small university centers of various types; and third, the planning and construction of additional campuses. The expected enrollment in 1972, the proposed opening date, and the projected enrollment gains for several years thereafter are the basic data used in planning. Estimates of enrollment potential are based on the following assumptions: 1) the institution will be an urban university; 2) it will initially offer upper-division courses and some graduate programs; 3) most of the students will be commuters; 4) initial undergraduate course offerings will be in arts and sciences, education, business, technology, and health-related professions; and 5) there will be a wide offering of evening division courses. Proposed future programs that will more specifically meet the needs of the Dade County area include urban studies, inter-American studies, hotel administration, social welfare, law enforcement, and optometry. Tables provide data on degree programs of other institutions of higher education in Florida, state demographic and economic data, and projected enrollment, area population, staff, and facilities of the new institution in Dade County. (DS)

EDO 32833

PLANNING FOR A NEW STATE INSTITUTION OF HIGHER LEARNING IN DADE COUNTY FLORIDA

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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October 1968

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THE NEW DADE UNIVERSITY

The opening of a university in Dade County presents the State University System with a unique opportunity. For the first time in the history of the State of Florida a university can be conceived, born and live in an urban community without the commitments which accompany historical growth. The following plan was written to provide a framework for the building of the university, beginning with the selection of the site through the construction of buildings to the implementation of programs.

To look at the figures which are amassed in this effort at planning is to be both awed and excited by the potentials for growth and constructive novelty in academic programs. By 1980 the university should have almost 20,000 students, an investment in buildings of $80,000,000, and a faculty numbering 890. Supporting employees will bring total employees, not including students, to almost 2,000. Thus, in a few years the Dade County university will become one of the giants of the university world.

The numbers speak to the need which can be fulfilled only through the inauguration and completion of the plan outlined herein. At least as important as the need of numbers of students and the training which their need represents, however, is the opportunity presented for a university which orients its programs to the solution of some of the most pressing problems of our age, namely, the urban settlements into which man has gravitated. Thus, the new university can focus its programs in economics, political science, management, sociology, education—indeed the spectrum of disciplines—upon the laboratory consisting of the community in which it is located. It also can specialize in the training of teachers and leaders in the field of the disadvantaged. Moreover, in contrast with other long-established urban centers, the major growth of metropolitan Miami lies immediately ahead. Projections are that its population will double within the next 20 years. Thus the new university will be presented with the unique opportunity to help shape the future city as well as to study its current urban environment.

A second opportunity lies open to the university. It is located at the nearest geographical point of mainland United States to an area which will become of growing importance to this country. Beginning with the Monroe Doctrine through the Alliance for Progress, the United States has recognized that its welfare is interwoven with the welfare of its neighboring countries to the south and the north. As the university orients its programs to a solution of urban problems which surround it, so it can be a connecting link between the culture, economics, and political systems of the Americas.

The plan which follows is a detailed statement of programs, buildings, and people who will help us to realize the goals which the fortuitous happenstance of geography and surroundings have made possible. In perusing the details, let no one lose sight of the greater vision.

Robert B. Mautz
Chancellor

1 PRESENT STATUS

In 1965, the Legislature authorized the establishment of a new state institution of higher education in Dade County, as well as a study to determine the feasibility of placing a public institution of higher education in that county. In December 1966, the Office of the Florida Board of Regents issued a report of the results of such a feasibility study in which it was estimated that by 1972 existing public state universities will be at or beyond their present enrollment ceilings, and that there would be approximately 3400 students in the Dade County area (primarily junior college graduates) who will seek to enroll for the first time in upper divisional work leading to a baccalaureate degree. The 1967 Legislature authorized the expenditure of 1.4 million dollars, subject to the sale of bonds, to begin construction of the new institution. Planning money, however, was not appropriated at that time. The special session of the Legislature in 1968 appropriated $225,850 for planning the new institution and employing a cadre of individuals which would serve as the nucleus of its central administration. The same special Legislature in 1968 also appropriated $174,398 for use by the Board of Regents to open a Continuing Education Center in Dade County (Miami Beach) in the fall of 1968 as a part of Florida Atlantic University. This center presently offers selected upper division and graduate courses in the arts and sciences, teacher education, and business administration, and can accommodate 400 full time students or the equivalent.

2 EARLIEST OPENING DATE

September, 1972 is the earliest possible date for admitting the first class to the new state institution. As mentioned above, 1.4 million dollars (subject to the sale of bonds) has been authorized by the Legislature to begin construction of the new institution. This amount will, of course, have to be augmented with an additional appropriation by the 1969 Legislature in order to complete the minimum physical plant that would be necessary before the institution could be opened. *Assuming, (1) that final selection of a site is completed by late fall 1968, (2) that planning for construction is initiated at the same time, (3) that sufficient operational funds are appropriated by the 1969 Legislature, and (4) that it will be possible to begin implementation of construction plans no later than when the appropriation becomes effective (probably in late 1969), it would take at least until the spring of 1972 before permanent buildings would be substantially ready for occupancy and it would probably be the fall of 1972 before the institution could admit its first class of students.* Any delay in the suggested schedule would make it difficult to open the institution by the fall of 1972.

3 PUBLIC HIGHER EDUCATION NOW AVAILABLE

The State Center for Continuing Education, which now operates as part of Florida Atlantic University, was opened in the fall of 1968 in the Ida Fisher School in Miami Beach. The academic offerings of the Center for the first year consist of selected courses in mathematics, social sciences, humanities, business, and teacher education. These are junior, senior, and graduate level courses and in various combinations may apply toward several possible degree programs which are presently authorized for Florida Atlantic University. Insofar as possible, the planning took into account the existing offerings of private institutions in the area to insure complementary programs. When the new state institution is opened in 1972, the Center if continued will be administered by the new state institution.

4 POPULATION OF REGION TO BE SERVED

The Broward-Dade region for many years has been the most rapidly developing population center in Florida. Table 1 shows that the combined population of Broward and Dade counties will continue to increase, although its future population as a per cent of the future total state population will remain rather stable. Dade County will continue to maintain its frontranking position as the most heavily populated county.

In 1950 approximately 21 per cent (589,500) of the state's population lived in this south Florida area. By 1965 the percentage had grown to 26 per cent (1,513,000) of the total state's population. During this same period the total population in the age group 20 to 24 years increased from 35,370 in 1950 to approximately 90,780 in 1965 (Table 1). By 1970 the figure is expected to exceed 100,000.

In 1950 one out of every five people in Florida lived in these two counties. Today, one out of every four people in Florida live in Broward and Dade counties. Although the establishing of Florida Atlantic University in south Palm Beach County in 1962 made a public degree-granting institution generally available to young people in the lower east coast of Florida, the need for a similar institution more central to metropolitan Dade remains undiminished.

5 THREE PLANNING PHASES

Accommodation of large numbers of students who will attend the new university must be preceded by plans for sufficient numbers of faculty and staff phased as needed, as well as plans for an orderly expansion of campus construction and facilities. Programs of higher education could more effectively be provided to a larger number of students in the Dade metropolitan area if the university were comprised of more than one campus (perhaps two) and several small centers throughout the metropolitan Dade area.

The first phase of developing a multi-campus university, therefore, should be the selection of a site or sites for the first campus and the construction of facilities. As a second phase, small university centers of various types with specific offerings should be developed in selected locations as the needs become apparent and budget becomes available. The third phase in the development of the university would consist of planning and constructing additional campuses on appropriately selected sites in the area. Initiation of this third phase would occur at such time as it is determined that additional campuses are needed and as budget becomes available for this purpose.

6 BASIC PLANNING ASSUMPTIONS

- In planning the development of the first campus of the university, it is necessary to determine the number of students expected to attend the institution initially and to project anticipated increases in students each year for the next several years. Enrollment projections combined with anticipated programs are then a base for determining the needed number of faculty and staff and the number of square feet of classroom, laboratory, and office space that will be required to accommodate the students, faculty, and staff. Eventually, the number of faculty and staff and the amount of space that will be required must be translated into dollars so that appropriations can be requested from the Legislature.
- In projecting student enrollments, however, certain assumptions must be made regarding the objectives of the institution, the types of programs that will be offered and the level of students which it will serve. Planning for the new institution included consideration of the following assumptions:
- By virtue of the fact that the new institution will be located in a densely populated metropolis, it must necessarily have different objectives and goals than the other state universities in Florida. Curricula to be offered and the educational services to be provided must serve the immediate metropolitan Dade area rather than the state as a whole. *It is assumed, therefore, that this institution will be an urban university, serving a student population characteristic of a large city.* Not only should curricula take into account the needs of a large metropolitan population, but the university should become involved in various ways in addressing itself to burgeoning urban problems which constitute the major challenge of our time.
- All high school graduates in metropolitan Dade who wish to continue with post-high school education have access to junior colleges in Dade and Broward counties. Graduates of junior colleges in that region, however, do not have commuting access to state-supported higher education beyond the junior college. *It is assumed, therefore, that initially the new university will be an upper division and graduate institution to accommodate such students and thereby to fill the most obvious and pressing educational need.* At a later date, if experience shows that there is justified need, a lower division can be added.
- Since the greatest initial need in metropolitan Dade is to provide facilities to accommodate the many individuals who have completed junior college programs and cannot afford to enroll in local private institutions, or leave their homes to enroll in other state universities, it appears that the vast majority of students who will enroll at the new state institution will be residents of Florida within commuting distance of the campus. *It is assumed, therefore, that most of the students will be commuters within a radius of 30 miles of the campus, with a substantial number commuting from along the heavily populated eastern seaboard of metropolitan Dade.*
- In the existing state university in the fall of 1968, 70 per cent of all upper level and graduate students were enrolled in three general areas, namely, education, business administration, and the arts and sciences. *Enrollment projections are based on the assumption that the instructional offerings of the new institution will initially encompass upper division programs in education, arts and sciences, business administration, technology, and health-related professions, with master's level work in education, and perhaps business administration.*
- *Because many of the potential students are employed during the day, it is assumed that evening classes will be offered in greater number and variety than would be normal in a non-urban university.*

7 CURRICULA

INITIAL UNDERGRADUATE PROGRAMS

Arts and Sciences.—Any college or university must have as its core curricula programs in the arts and sciences disciplines. Such programs not only serve students majoring in the arts and sciences, but also students majoring in business administration, education, and other professional areas who require arts and sciences offerings to supplement their professional curricula. For example, in the State University System in 1967, 38 per cent of the upper division and graduate students were registered in the arts and sciences (Table 2). Nearly all of the remaining 62 per cent (40 per cent registered in education and business administration and 22 per cent in engineering, etc.) took one or more arts and sciences courses to round out their programs of study.

Table 1

POPULATION ESTIMATES:

BROWARD, DADE, STATEWIDE, AND OF 20 TO 24-YEAR-OLD AGE GROUP, 1950-1965, AND PRO

Year	Broward Population (1)	Dade Population (2)	Broward & Dade Total (Col. 1 & 2) (3)	Brow % of T
1950	83,600[1]	505,900[1]	589,500	2
1951	97,400	548,400	645,800	2
1952	108,100	582,700	690,800	2
1953	124,400	626,200	750,600	2
1954	144,300	668,500	812,800	2
1955	170,900	713,100	884,000	2
1956	206,900	772,200	979,100	2
1957	245,400	831,800	1,077,200	2
1958	282,900	894,700	1,177,600	2
1959	306,600	919,700	1,226,300	2
1960	341,100[2]	942,800[2]	1,283,900	2
1961	370,800	984,500	1,355,300	2
1962	379,900	1,032,500	1,412,700	2
1963	390,000	1,077,000	1,467,000	2
1964	403,200	1,075,500	1,478,700	2
1965	423,800	1,089,200	1,513,000	2
1970	520,700[4]	1,200,000[4]	1,720,700	2
1975	640,800[4]	1,300,000[4]	1,940,800	2
1980	723,300[5]	1,468,000[5]	2,191,300	2
1985	795,800[5]	1,616,000[5]	2,411,800	2

[1] 1950 Census: Broward, 83,900; Dade, 495,000; statewide, 2,771,300
[2] 1960 Census: Broward, 333,900; Dade, 935,100; statewide, 4,951,600
[3] Projections based on the assumption that out-migration and in-migration patterns will converge until net migration reaches zero by the end of the projected period
[4] Bureau of Economics and Business Research, *Projections of The Population of Florida Counties for July 1, 1970 and July 1, 1975,* by Ronald E. Beller (Gainesville: University of Florida, 1967), p. 3
[5] Florida Board of Regents projections

May 1, 1968

E GROUP, 1950-1965, AND PROJECTIONS AT FIVE YEAR INTERVALS, 1970-1985

Broward & Dade Total (Col. 1 & 2) (3)	Broward & Dade % of Statewide Total (4)	Broward-Dade Total Population Age 20-24 (5)	Statewide Population (6)
589,500	20.96	35,370	2,810,400[1]
645,800	21.77	38,748	2,166,600
690,800	22.41	41,448	3,117,800
750,600	22.85	48,024	3,284,300
812,800	23.46	48,768	3,462,000
884,000	24.09	53,040	3,669,900
979,100	24.84	58,746	3,941,200
1,077,200	25.38	64,656	4,244,900
1,177,600	25.76	70,656	4,570,800
1,226,300	25.60	73,578	4,790,300
1,283,900	25.68	77,034	4,799,000[2]
1,355,300	26.03	81,318	5,205,000
1,412,700	26.20	84,762	5,392,000
1,467,000	26.52	88,020	5,531,000
1,478,700	26.17	88,722	5,650,000
1,513,000	26.10	90,780	5,796,000
1,720,700	26.05	103,242	6,604,000[3]
1,940,800	25.76	116,448	7,533,000[3]
2,191,300	26.00	131,478	8,428,000[3]
2,411,800	26.00	144,708	9,276,000[3]

e until net

es for July 1, 1970

Teacher Education.—The current demand for graduates in teacher education, which approximates 22,000, will increase to about 23,800 in the next four years, and then tend to remain at that level. As shown in Table 3, an annual increment of approximately 15 per cent of the estimated total number of personnel with degrees in education employed in any one year is needed to maintain an adequate supply of trained personnel in the Miami area. This increment, both for the current year and projected through 1977, is about three times as large as the baccalaureate output in 1968 for the three existing degree-granting institutions in the area offering teacher education programs (University of Miami, Barry College, and Florida Atlantic University) which numbered 1,120 persons in that year.

Not only is there a substantial deficit in the number of new teachers produced annually; there is also a serious deficit in the capability of the state institutions in meeting the continuing education needs of teachers already in service in the Dade County-South Florida area. In 1967-1968, county school systems in the area requested the state universities to offer 336 credit courses for teachers in order to meet in-service needs identified by these counties. Only 220 of these courses were offered, leaving a shortage of 116 credit courses which could not be offered by and of the state universities (Table 4).

Business Administration.—The demand for trained personnel in business and accounting is even more pressing than in education, and the supply of graduates more limited. Dade County, with 23 per cent of the state's total personal income in 1966, continued to lead the remainder of the state in economic development (Table 5). Another index of the strong economic thrust of the Miami area is provided by the number of new plants built throughout Florida, including expansions to existing facilities. In 1967, 212 new plants (30 per cent of the state's total) were built in Miami (Plant Status Report, Florida Development Commission, July, 1968). The high level of economic activity, as reflected by Dade's first rank position in the state in total personal income and by its large share of new plant construction in Florida, creates the pressing demand for college-trained persons with degrees in business and administration, accounting, and related fields of business and commerce.

The output of the Miami area colleges and universities of graduates in business administration, accounting, and commerce is relatively high with respect to the output from other colleges and universities in Florida (Table 6). As shown in Table 6, the University of Miami ranked second in the state in 1966, in the production of accounting graduates (Florida State University ranked first). The University of Miami's output in the related fields of sales, insurance, etc., was also relatively high. Even so, placement officers at that institution reported a woefully inadequate number of candidates in business administration, accounting, sales, real estate, and insurance for referral to prospective employers who visited the campus seeking to fill their personnel needs.

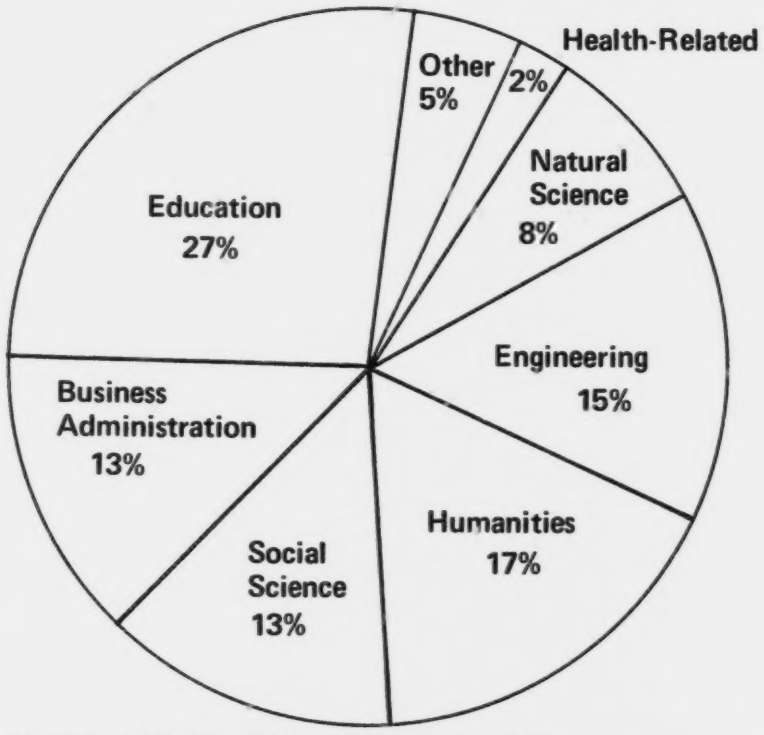
Technology.—During the past 20 years, engineering programs offered by major universities have tended to become less applied and more theoretically and research oriented. As a result, the industrial community is experiencing a shortage of individuals with training in technology similar to that provided by many engineering schools prior to 1945. The community colleges have attempted to fill this void by offering two-year terminal programs in various fields of technology. Junior college graduates of these programs have to some extent filled the demand for technicians, but there still exists a need for technology graduates with the baccalaureate degree whose programs of study are more applied and less research oriented than those of the present-day graduates of the engineering schools of our universities.

Industry, together with the graduates of the two-year technology programs offered by the community colleges, is voicing a plea that technology programs leading to the baccalaureate degree be established. Although none of our state universities presently offer such programs, several state universities are planning to do so. There is no question but that the future graduates of the technology programs, both from the proposed new institution and from the projected programs of the existing universities, are needed to bridge the gap between the research engineer and management.

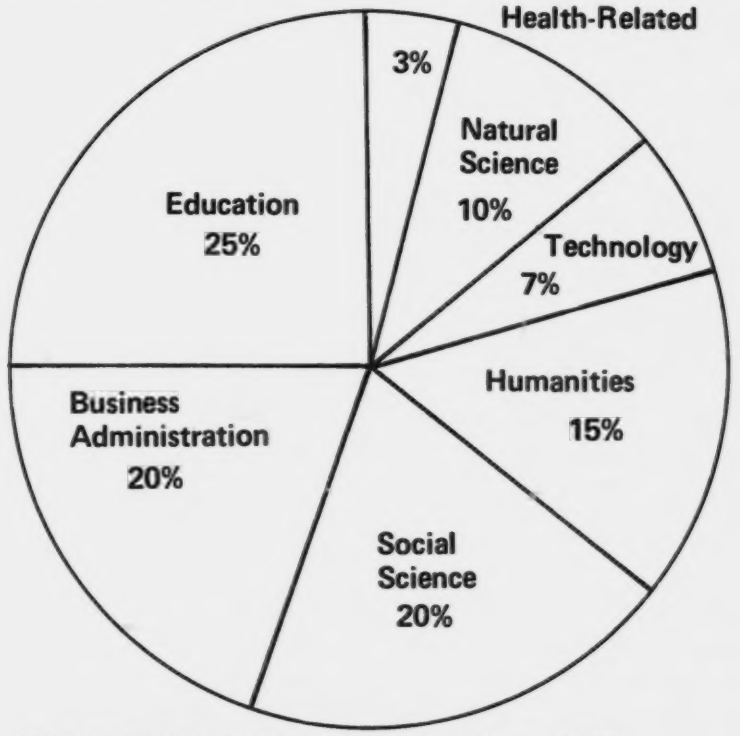
Despite the interest of existing state universities in introducing into their curricula technology programs leading to the bachelor's degree, the proposed new institution in Dade County may well be the most appropriate college to offer the technology program initially. During the five-year period 1960-64, Dade added 994 new plants and expansions, employing an estimated 21,956 persons, representing 33 per cent of the new industrial plants built in Florida in that span of years. Apparently Dade is not losing any of its momentum in bringing in new plants, being chosen as the site for 30 per cent of the new plants built in Florida in 1967, as was pointed out in an earlier section of this report. Its 1966 nonagricultural labor force of 376,800 workers (approximately 20 per cent of the state's total nonagricultural labor force) far exceeded that of any other Florida county.

'ABLE 2

NROLLMENTS BY PROGRAM ESTIMATES UPPER DIVISION AND GRADUATE



STATE UNIVERSITY SYSTEM 1967



PROJECTED DADE INSTITUTION 1972

'ABLE 3

Professional Education Personnel Needed in Counties Served by New State Institution at Miami*

	Estimated Total Number Personnel Employed	Estimated Number New Personnel Needed		Estimated Total Number Personnel Employed	Estimated Number New Personnel Needed
1968-69	22,006	3,792	1973-74	23,809	3,208
1969-70	22,609	3,651	1974-75	23,821	3,125
1970-71	23,120	3,592	1975-76	23,786	3,062
1971-72	23,563	3,564	1976-77	23,752	3,047
1972-73	23,731	3,329	1977-78	23,683	3,005
					33,375

*Estimates prepared by Division of Teacher Education, Florida State Department of Education. Projections of new personnel needed each year are based on turnover rates for State of Florida in 1965-66 and 1966-67 and present staffing patterns. Does not include new programs in special education and kindergartens authorized by 1968 special session of the legislature. Implementation of new programs will increase number of educational personnel needed, as will new staffing patterns recommended for quality programs. These estimates, therefore, may be regarded as conservative.

TABLE 4

Continuing Education Credit Courses for Teachers in Dade County-South Florida Area, 1967-68

	Requested	Offered	Not Offered
Broward	102	55	47
Charlotte	3	3	0
Collier	10	7	3
Dade	82	70	12
Glades	1	1	0
Hendry	1	1	0
Indian River	4	3	1
Lee	25	14	11
Martin	9	5	4
Monroe	8	3	5
Okeechobee	2	2	0
Palm Beach	77	53	24
St. Lucie	12	3	9
Totals	336	220	116

Counties underscored are in geographic service area currently assigned to Florida Atlantic University. Counties not underscored are in service area of the University of South Florida.

Of the 220 courses offered, 135 were offered by Florida Atlantic University, 57 by Florida State University, 6 by University of Florida, 4 by Florida A & M University, and 18 by University of South Florida.

Nursing and Other Health-Related Occupations.—The State Department of Education has identified nine Florida counties as having a high anticipated demand for persons trained in the health occupations (Survey of Health Occupations, State of Florida, 1967).

Among the health professions, the greatest shortage is for nurses. In the Miami area, baccalaureate degree programs in nursing are offered by Barry College and by the University of Miami. A hospital diploma school of nursing located in Jackson Memorial Hospital, Miami, and a two-year nursing program offered by Miami-Dade Junior College also enroll large numbers of nursing candidates. Even so, the supply of nurses in the Miami area is very inadequate, largely because of the many professional opportunities for nurses (estimated to approximately 1,250 nurses annually) and the high attrition in the ranks of trained nurses (estimated to 50 per cent).

Area technical and vocational schools train substantial numbers of persons for such health occupations as laboratory assistant, medical record technician, radiological technician, surgical technician, and 15 other specialties. Two-year training programs leading to these health-related occupations would not be offered at the proposed new institution, which instead would offer selected programs in medically-related professions leading to the baccalaureate degree. Examples of types of medically-related programs requiring the four-year degree that might be considered after the institution becomes firmly established are:

- Corrective Therapist
- Cynotechnologist
- Dental Hygienist
- Manual Arts Therapist
- Medical Illustrator
- Medical Record Librarian
- Medical Technologist
- Nuclear Medical Technologist
- Orthotist or Prosthetist
- Physical Therapist
- Recreation Therapist

Other health professions requiring at least four years of college, but preferably an additional year or so to be taken at a later date are:

- Biochemist
- Biomathematician
- Biophysicist
- Health Economist
- Industrial Hygienist
- Radiological Health Specialist

TABLE 5

Twenty Florida Counties with Highest Total Personal Income for Participating in Production, 1966

	Total	% of State Income		Total	% of State Income
Florida	11,009,000,000		Lee	134,015,000	1.22
Alachua	172,820,000	1.57	Leon	182,981,000	1.66
Bay	100,473,000	0.91	Manatee	97,497,000	0.89
Brevard	717,025,000	6.51	Marion	81,963,000	0.74
Broward	698,862,000	6.35	Okaloosa	109,553,000	1.00
Dade	2,545,809,000	23.12	Orange	632,154,000	5.74
Duval	1,049,798,000	9.54	Palm Beach	567,809,000	5.16
Escambia	336,233,000	3.05	Pinellas	624,723,000	5.67
Hillsborough	877,999,000	7.98	Polk	445,674,000	4.05
Lake	95,211,000	0.86	Sarasota	153,008,000	1.39
			Volusia	226,971,000	2.06

Source: *Florida Statistical Abstract,* 1968, Bureau of Economic and Business Research, University of Florida, Gainesville.

TABLE 6 Graduates in Business Administration, Accounting, and Related Business and Commerce Programs (Sales, Insurance, etc.) of Colleges and Universities in Florida, 1966

	Business Administration (Business and Commerce)		Accounting		Insurance, Sales, Real Estate, Etc.	
	Bachelor's	Master's	Bachelor's	Master's	Bachelor's	Master's
Biscayne College	–	–	2	–	–	–
Florida Atlantic	2	–	6	–	32	–
Florida Southern	76	–	14	–	5	–
Florida State	–	26	105	7	330	43
Jacksonville University	30	–	22	–	15	–
Rollins	52	96	15	–	–	–
Stetson	29	–	15	–	17	–
University of Florida	–	33	81	9	201	4
University of So. Florida	10	–	52	–	66	–
University of Miami	8	–	91	3	306	14
University of Tampa	60	–	12	–	–	–
Total	267	155	402	19	972	61

Source: Higher Education General Information Survey

INITIAL GRADUATE PROGRAMS

Education.—According to the State Department of Education, there were 11,274 teachers in the public schools of Dade County in 1968. For the state as a whole, there were 64,104 teachers employed in 1968.

Despite the large concentration of teachers in Dade County, the number of teachers receiving Rank 2 certificates (which require the master's degree) from the University of Miami and being assigned to Florida schools for the first time has remained stable over a three-year period (Tabie 7). During the same three-year period, the output of Florida Atlantic University showed a phenomenal gain.

Public school officials estimate that for every teacher in Dade County who enters graduate work at the University of Miami or elsewhere in Florida, there are three or more who do not do so because of limited finances, coupled with a disinclination to leave Dade County for such a purpose. Although the availability of graduate education programs at Florida Atlantic University is now easing the problem somewhat, as the figures in Table 8 show, the potential reservoir of master's degree candidates of the new institution is of a magnitude that will lead to an output of Rank 2 certificate holders for Dade County exceeded only by two, perhaps three, existing institutions in Florida.

Business Administration.—A review of the graduate on-campus enrollment for the period 1960-1966 in five public universities and the University of Miami reveals a high demand for graduate study by persons who hold the baccalaureate degree and who live in a metropolitan area. As shown in Table 8, both Florida Atlantic University and the University of South Florida expanded on-campus graduate enrollment very rapidly in the span of four years. The proposed public institution for Dade County may be expected to enroll as many on-campus graduate students in its opening year as the University of South Florida enrolled in 1965. (With reference to the proposed institution, "on-campus" does not imply that the students will live in on-campus residence halls, but rather, that they will take graduate courses taught on the campus. At the University of Florida and Florida State University, many on-campus graduate students occupy university housing; at the proposed institution, the on-campus graduate students will be wholly commuters.)

Throughout the State University System in 1967, there were 2,453 students in graduate education, with 362 students enrolled in graduate business programs leading to the master's degree, yielding an index of about one student in graduate business to every six in graduate education. In Dade County, where about 25 per cent of the state's economy is located, the ratio is estimated to be about one student in graduate business to every four in graduate education. In round numbers, at least 90 students will enroll in graduate business; the total expected graduate enrollment will be 350 students.

In a previous section of this report that discussed undergraduate work in business administration, the point was made that the University of Miami had a high output in accounting and in the other business administration degree programs. High output at the baccalaureate level is, of course, a major input factor for graduate study, and is a firm basis for predicting the substantial enrollment in graduate business administration at the proposed institution.

EVENING CLASSES

Existing institutions of higher education located in an urban setting enroll substantially large numbers of students who wish to attend classes between 5 and 10 P.M. The proposed Dade institution can be expected to experience a pressing demand to offer classes during the evening hours, and should schedule a large variety of courses to meet this demand. Beginning in 1970, surveys should be undertaken in the Miami area to identify the types of courses in greatest demand, and to gauge more precisely the probable enrollment in the evening session, which is currently estimated to be about 400 students.

INSTRUCTIONAL TELEVISION

The new state institution should make optimum use of closed-circuit television and other types of educational technology which might help to improve quality of teaching and make available to students certain types of programs which would be otherwise unavailable.

FUTURE PROGRAMS

Inter-American Programs.—The City of Miami has a background of Spanish history as well as a large Spanish-speaking population, and is considered to be the gateway between North and South America. All institutions of higher learning in the Miami area should emphasize some phase of inter-American studies, and several of the institutions are already doing so. The Board of Regents and the State University System of Florida have traditionally sought to develop closer relations with Latin and South America and to strengthen the academic ties between the Americas. The new state institution should develop programs of inter-American studies which will complement those offered by other institutions in the area. Three possible types of programs which might be considered for the new state institution are: (a) *An Inter-American Learning Institute* which would provide short-term programs of intensive English training and cultural orien-

TABLE 7

Number of Rank 2 Teachers Graduated, 1966-68

	1966		1967		1968
Florida State University	63		45		32
Florida A & M University	10		9		1
University of Florida	61		68		81
University of Miami	21		18		18
Florida Atlantic University	9		23		45

TABLE 8

Total Number of Students Enrolled in On-Campus Graduate Programs in Six Institutions of Higher Learning, 1960-1967

	1960	1961	1962	1963	1964	1965	1966	1967
FAMU	229	183	246	269	298	376	422	427
FAU	–	–	–	–	2	783	1,165	1,131
FSU	1,335	1,432	1,577	1,669	2,008	2,177	2,458	2,957
UF	1,309	1,401	1,526	1,844	1,988	2,182	2,478	4,218
USF	–	–	–	–	127	377	763	1,017
UM	958	1,021	1,701	1,085	1,284	1,509	1,267	1,721

tation to students from Latin and South America prior to their pursuing regular studies in Florida universities and possibly at other U.S. institutions of higher learning, and to business and professional people from Latin and South America prior to their pursuing business and professional activities in the United States. The Institute would also provide short-term programs of intensive language training and cultural orientation to students from the United States prior to their pursuing regular studies in universities in Latin and South American countries and to business and professional people from the United States prior to their pursuing business and professional activities in Latin and South American countries. (b) *An Inter-American Continuing Education Center* which would organize and make available various types of cooperative programs such as workshops, seminars, etc., for professional and business people from the United States, Latin and South America. Consideration should be given to submitting a proposal to the Kellogg Foundation for supporting such a continuing education center. (c) *Teaching of selected courses* in various disciplines by Spanish- or Portuguese-speaking professors. A number of selected courses might each have a section in which the lectures would be delivered in the Spanish language. A student might then have a choice as to whether he would like to take lectures, say in a certain sociology, philosophy, or American History course, from an English-, Portuguese-, or Spanish-speaking professor. Courses taught in the Spanish or Portuguese languages would be most beneficial to primarily English-speaking individuals who wish to become competent in Spanish or Portuguese or to Latin or South American individuals who are attending the Florida institution but do not have time to learn the English language.

Urban Studies.—The growth of cities has greatly increased the need for trained individuals in urban planning. At the present, urban planning characterizes the development of almost all of the lower east coast. The Metropolitan Dade County Planning Department, the Broward County Area Planning Board, and the Palm Beach County Area Planning Board have cooperatively begun to plan for a 100-mile urban development from Homestead north to downtown Miami, then along the eastern seaboard to the northern limit of Palm Beach County, which is expected to occur between now and 1985. Between 30 and 50 towns and cities in the area will need urban planners, either on a full-time or consultant basis.

The new institution, located as it will be in a metropolitan area where urban planning is not just an accepted concept but an implemented approach to the development of the lower east coast, is a suitable and appropriate institution to offer a degree program in urban planning. Not only will students enrolled in this program likely have rich opportunities to participate in field training, but there will also be local opportunities for subsequent career placement.

Federal spokesmen representing the Department of Housing and Urban Development have in recent months pointed to new legislation which calls for a shift from narrowly defined urban renewal projects to more comprehensive city-wide programs. This new trend in federal legislation will not only heighten the need for additional trained personnel in urban planning, but will undoubtedly create a greater interest among undergraduates in urban planning as a career. By 1972, the projected date for opening the new Dade institution, the need for a degree program in urban planning at the new institution will probably be in sharper perspective than it is now.

The problems of the city involve the application of knowledge derived from economics, transportation, sociology, and political science as will as physical planning. The new institution must address itself to the ills of the surrounding major metropolitan area and become involved in helping to solve problems of the community of which it is a part. The university must commit itself to the strengthening of its departments concerned with urban studies and to the shaping of these disciplines in a way which will provide a focus of interest around urban affairs. The concept of urban planning involves the synthesis of these disciplines as applied to a central problem of our time.

Hotel Administration.—Florida State University's baccalaureate program in hotel and restaurant management, begun two decades ago, had an output of 59 degrees in 1967. This output is projected to increase to 79 degrees by 1972. Although a steady growth of the program has taken place and will continue, the output is equivalent to only about one tenth of the normal attrition in the ranks of hotel and restaurant personnel in Florida that takes place each year. Eight community colleges, including Broward Junior College and Miami-Dade Junior College, offer two-year programs, and the Dade County Public School System, in its Lindsey Hopkins Education Center, offers a number of courses in hotel training for persons with a ninth grade or above education.

One has only to take a look at the magnitude of the hotel and restaurant industry in Florida to perceive the gross inadequacy of its institutions to prepare the needed trained manpower. In 1967, the hotels alone in Florida employed 50,100 persons. Income from hotel and motel operations combined grew from $131 million in 1964 to $156 million in 1966, a gain of about 20 per cent.

There are at least two pressing reasons for including hotel and restaurant training in the curriculum of the proposed Dade institution. The first of these reasons is that

Florida, in recent years, has attracted tourists the year round, thereby adding a new component to its tourist industry. In 1967, the high month was July, with 2,317,925 visitors; the low month was October, with 1,287,637. The output of persons trained in hotel and restaurant management in the institutions, far too meager since World War II days, will only become more inadequate as year-round operations heighten the demand of the hotel and restaurant industry for management personnel.

The second reason for making hotel and restaurant training available in the new institution is that Dade and Broward Counties together have a heavy concentration of the hotels and restaurants in Florida. These two counties have 634 hotels, 904 motels, and 12,930 apartment houses, totaling 236,054 units, or approximately 48 per cent of the units in the state. In 1967, Dade and Broward Counties were hosts to 3,153,122 tourists arriving by automobile. To man the existing facilities as well as the new ones, the area urgently needs a steady stream of four-year graduates numbering far more that the presently available management personnel (Dade added 23,571 new tourist or rental units in 1967 and Broward added 3,499). The Florida Industrial Commission, in an effort to cope with the manpower shortage, maintains a separate division of the Florida State Employment Service in Miami to place persons seeking jobs in hotels and restaurants.

Optometry.—From time to time recommendations from various sources have been made to the Board of Regents that a school of optometry should be established at one of the state universities. Degree programs in optometry are now offered at many major universities in the country and do not necessarily have to be associated with medical schools. A study should be made to determine if there is a need for an optometry school in Florida (no such school exists at the present time). If it is determined that a need does exist, consideration might be given to developing a curriculum in optometry at the new state institution.

Social Welfare.—The major program in social work education in Florida is offered by Florida State University. In the four-year span from 1963-64 through 1966-67, the baccalaureate degree output rose from 116 to 223; the master's degree output during the same period rose from 64 to 107. As the above figures show, Florida State University has placed great emphasis on expanding its social work programs at the graduate level. A substantial proportion of its baccalaureate degree recipients enters graduate work. There is a need, either to expand undergraduate programs in social work at Florida State University, or to include this program in the offerings of the new Dade institution. Because of the heavy population of the Dade area, and the availability of many openings for persons trained in social work through the baccalaureate degree level, the inclusion of an upper division program in social work at the Dade institution seems appropriate.

Career Training in Police Administration and Law Enforcement.—The School of Social Welfare at Florida State University has a Department of Criminology and Corrections which offers undergraduate and graduate curricula in criminology and corrections. A candidate for advanced work may earn the master's or doctor's degree through the School of Social Welfare. The Certificate of Law Enforcement is awarded for 45 semester hours by correspondence or on campus with upgrading as the objective. In South Florida, Miami-Dade Junior College offers a two-year technical program in law enforcement, while Lindsey Hopkins Education Center offers several courses in police and detective education.

Florida experienced a 13.4 per cent increase in major crimes during 1966 over 1965. In 1967, the crime rate in Florida was 2,585 for every 100,000 population, which was sixth highest in the nation. Broward and Dade Counties, with a combined population of 1,591,000 and 9 of the 28 cities in Florida with populations over 25,000, had the highest crime rate in the state. The 9 large cities in Broward and Dade Counties have 1,925 law enforcement officers compared to only 2,668 in the other 19 cities throughout the state with a population over 25,000.

Throughout the nation from 1965 to 1966, the crime rate rose more than 10 per cent. In South Florida, the increase was even sharper, exceeding 13 per cent. Although comparable figures for 1966 to 1967 and 1967 to 1968 are not fully available, advance reports released by the Federal Bureau of Investigation are a basis for forecasting further increases in the crime rate. Greater numbers of individuals trained in law enforcement are needed to help cope with the adverse consequences brought about by the severe social problem of widespread crime. A program in law enforcement leading to the baccalaureate degree would be an appropriate major component of the curriculum of the proposed Dade institution. Graduates of such a program are needed, not only to fill immediate openings in police administration, but to enter advanced work at Florida State University, whose master's and doctoral output in criminology and corrections is in great demand both in Florida and nationwide.

8 PROJECTED ENROLLMENTS

Estimates of the enrollment potential for the first campus of the new institution are based on the assumptions

described in section 6 of this report. In summary, these assumptions are:

That the institution will be an urban university;
That initially the new university will be an upper division and graduate institution;
That most of the students will be commuters within a radius of 30 miles of the campus;
That initial instructional offerings will be in education, arts and sciences, business administration, technology, and health-related professions with master's work in education (and perhaps in business);
That there will be a wide offering of evening classes between 5 and 10 P.M.

An earlier study to determine feasibility, in terms of enrollment potential, made by the Regents staff in 1966 utilized enrollment data from schools and colleges in Florida extending through 1965. The present projections were based on the latest available enrollment figures, which were obtained in the fall of 1967.

No assumption was made in the present study that students from the surrounding counties would move to Miami to swell the enrollment potential. Projections were restricted to Dade and Broward counties to assess the dimensions of the enrollment reservoir in metropolitan Dade only. The projections are likely to prove conservative, for certainly some of the graduates from junior colleges in south Florida other than the Junior College of Broward County and Miami-Dade Junior College will enroll in the proposed institution.

To arrive at an estimate of enrollment potential, projections of the associate degree output of the two largest junior colleges in the area (Junior College of Broward, Miami-Dade—North and South Campuses) were made. These output projections were equated with input capabilities of the two principal degree-granting institutions in the area (Florida Atlantic and the University of Miami). Enrollment trends of metropolitan Dade students in other senior institutions, both in Florida and out-of-state, was considered in gauging the remaining pool of students academically prepared to enter upper division study in 1972.

In 1967, the Junior College of Broward County and Miami-Dade Junior College (North and South campuses combined) awarded 2,759 associate degrees. Approximately 1,400 of these students enrolled in baccalaureate degree-granting institutions. The percentage (estimated) distribution of their choices of an institution to attend was as follows: Florida Atlantic University, 45%; University of Miami (and other private institutions in the Miami area), 10%; colleges and universities in Florida, public and private, outside of the Miami area, 40%; out-of-state colleges and universities, 5%.

By 1972, the output will rise to a projected 5,000 associate degrees. If no public degree-granting institution is established in Dade, the number of these two-year graduates continuing in college will approximate 2,500. When the new institution opens in Dade, the number will rise to about 3,500. Of these, at least 1,250 will likely enroll at the proposed new institution.

At this point, the large number of persons awarded the associate degree from the two large public junior colleges in Broward and Dade counties during the period 1962-1972 not pursuing the baccalaureate degree must be considered. This group of potential students will, by 1972, number 15,000. A conservative estimate of the full-time degree-seeking students who will enroll as carry-overs is 2,250; a liberal estimate is 3,500. When the conservative estimate is combined with the 1,250 students receiving their associate degrees in 1972, and who will probably elect to enter without delay the proposed institution, a total of 3,500 full-time day students is projected.

If the institution operates on a 14-hour schedule (from 8:00 A.M. to 10:00 P.M., Monday through Friday) as assumed, an additional 400 students will enroll as part-time evening students. This estimate is based on the expectation that the institution will easily expand its day-student enrollment by slightly more than ten per cent by offering selected upper-level courses of wide appeal from 5 to 10 P.M. A much larger enrollment of evening students will occur if the new institution possesses staff and class space to increase its offering of evening courses.

Graduate enrollment will reach 350 with minimal graduate offerings. As in the case of the evening enrollment, the size of the initial graduate enrollment in 1972 is more a function of the institution's staffing and space resources than of student demand.

The 1972 enrollment potential of the proposed Dade institution, based upon the assumptions set forth on page 7, is as follows: 3,500 fulltime upper-division day students; 400 part-time upper-division evening students; 350 graduate students (master's level).

Phase I enrollment projections from 1972 through 1980 are shown in Table 9. These projections are based on the additional assumption that adequate faculty and space facilities can be provided to support the strong demand for baccalaureate degree study that will characterize metropolitan Dade during the 1970's.

Estimates of Program Enrollments: Phase I enrollments by programs in the new institution will fall into a pattern shown

by the following estimates:

Business Administration	20 per cent
Education	25 per cent
Humanities	15 per cent
Social Sciences	20 per cent
Natural Sciences	10 per cent
Health and Medical Programs	3 per cent
Technology	7 per cent

It is difficult to say how long this initial pattern of enrollments by program will persist, but there is basis for the belief that it will not change substantially for at least a decade. For example, in the existing state universities in the fall of 1968, 70 per cent of all upper level and graduate students were enrolled in the three general areas of education, business administration, and arts and sciences, despite the wide range of other areas of professional study open to them (Table 2, page 6).

9 FACULTY AND STAFF COST DATA

Administrative, faculty and non-academic support positions to meet the anticipated instructional workload may be estimated by applying staffing factors and procedures used in legislative requests for the State University System. In all instances where the choice of a conservative or liberal standard or projection was presented, the conservative choice was used. The first step required is to convert headcount enrollments (Table 9, page 15) to full-time equivalent (FTE) students and then to student credit hours. Tables 10 and 11 show the conversion. Table 10 indicates the number of faculty, administrative and non-academic support positions projected for the new institution. Table 11 indicates total academic positions.

By 1980 approximately 2,000 FTE faculty and staff positions will be required to support the student enrollment (50% Instruction and Research, 15% Faculty Support, 15% Administration and General, 20% Physical Plant). The institution would start at approximately the enrollment of Florida Atlantic University in 1967 (operating budget for Education and General of approximately $6.5 million) and would expand to roughly four times that size by 1980. A conservatively estimated annual operating budget by 1980 is $35 million. Faculty salaries alone should require about $18,000,000 by 1980.

10 SPACE NEEDS

Assuming that the Dade County institution (1) will

ABLE 9

Estimated Upper-Division and Graduate Enrollment in the Public Degree-Granting Institution for Dade County, 1972-1980

	Total	Upper Division Day Enrollment	Upper Division Evening Enrollment	Master's Level Enrollment	Doctor's Level Enrollment
1972	4,250	3,500	400	350	–
1973	6,190	4,680	720	790	–
1974	8,130	5,860	1,040	1,230	–
1975	10,080	7,050	1,360	1,670	–
1976	12,050	8,240	1,680	2,110	20
1977	14,030	9,430	2,010	2,550	40
1978	.16,010	10,620	2,340	2,990	60
1979	18,000	11,810	2,670	3,430	90
1980	20,000	13,000	3,000	3,880	120

Table 10

PROJECTED STAFFING: NEW UNIVERSITY IN DADE COUNTY

	1972	1973	1974	1975
Recap of Numbers of Faculty Positions				
FTE Classroom Teachers	161.68	225.34	288.35	352.15
FTE Research Positions	11.63	16.92	22.18	27.48
FTE Professional Services Positions	3.23	4.51	5.77	7.04
FTE Academic Counselors	17.00	24.76	32.52	40.32
FTE Academic Administrators	19.35	24.68	29.07	32.85
Total Academic Positions	212.89	296.21	377.89	459.84
Less: Academic Positions to be filled by Graduate Assts.	—	—	—	—
Number of Regular Faculty	212.89	296.21	377.89	459.84
Non-Faculty in Instruction and Research				
Number of Academic Positions per Non-Academic Position	3.00	3.00	3.00	3.00
Number of Non-Academic Positions in Instruction & Research	70.96	98.74	125.96	153.28
Administration and General				
Number of FTE Students per FTE Admin. & General Position	25.00	30.00	30.00	35.00
Total FTE Administrative and General Positions	128.92	149.23	191.00	199.80
Plant Operation and Maintenance				
Total FTE Physical Plant Positions	110.00	131.00	171.00	211.00
Library				
Total FTE Professional Positions	15.00	20.00	23.00	25.00
Total Non-Professional Positions	25.00	30.00	33.00	35.00
Total Library Positions	40.00	50.00	56.00	60.00
Total All Positions (Projected)	562.77	725.18	921.85	1,083.92

Assumptions:
(I) Productivity 300—Upper Level
220—Master's Level
120 Doctoral Level

	1974	1975	1976	1977	1978	1979	1980
24	288.35	352.15	416.86	481.88	546.79	612.20	677.82
02	22.18	27.48	32.98	38.52	44.03	49.65	55.29
51	5.77	7.04	8.34	9.64	10.94	12.24	13.56
76	32.52	40.32	48.20	56.12	64.04	72.00	80.00
68	29.07	32.85	38.95	45.09	51.22	57.39	63.59
21	377.89	459.84	545.33	631.25	717.02	803.48	890.29
—	—	—	—	—	—	—	—
21	377.89	459.84	545.33	631.25	717.02	803.48	890.29
00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
74	125.96	153.28	181.78	210.42	239.00	267.83	296.76
00	30.00	35.00	35.00	40.00	40.00	42.00	45.00
23	191.00	199.80	236.11	238.53	270.40	289.07	297.33
00	171.00	211.00	243.00	291.00	332.00	371.00	410.00
00	23.00	25.00	30.00	33.00	35.00	38.00	40.00
00	33.00	35.00	40.00	45.00	50.00	55.00	60.00
00	56.00	60.00	70.00	78.00	85.00	93.00	100.00
18	921.85	1,083.92	1,276.22	1,449.20	1,643.42	1,824.38	1,994.38

TABLE 11

PROJECTED STAFFING: NEW UNIVERSITY IN DADE COUNTY

	1972	1973
Number of FTE Teachers (Resident Instruction)		
Upper Division	155.35	211.10
Graduate Division		
(a) Non-Doctoral	6.33	14.24
(b) Doctoral	—	—
(c) Total Graduate	6.33	14.24
All Divisions	161.68	225.34
FTE Research Positions		
Number of FTE Research Positions		
Undergraduate (Ratio Teaching Positions to Research 15:1)	10.36	14.07
Graduate (Ratio Teaching Positions to Research 5:1)	1.27	2.85
Total	11.63	16.92
Professional Services Positions (FTE)		
(a) Number of FTE Teachers per FTE Professional Svcs. Pos.	50.00	50.00
(b) Number of FTE Professional Services Positions	3.23	4.51
FTE Academic Counseling Positions		
(a) Number of Students (Headcount) per FTE Acad. Couns. Pos.	250.00	250.00
(b) Number FTE Academic Counseling Positions	17.00	24.76
Total Teaching, Research, Prof. Svcs. & Academic Couns. Pos.	193.54	271.53
FTE Academic Administrative Positions		
(a) Number of Teaching, Research, Prof. Svcs. & Academic Counseling Positions per FTE Administrative Position	10.00	11.00
(b) Number of FTE Administrative Positions	19.35	24.68
Total Academic Positions	212.89	296.21

1974	1975	1976	1977	1978	1979	1980
266.20	322.10	377.90	433.95	489.95	545.95	602.00
22.15	30.05	37.96	45.93	53.84	61.75	69.82
—	—	1.00	2.00	3.00	4.50	6.00
22.15	30.05	38.96	47.93	56.84	66.25	75.82
288.35	352.15	416.86	481.88	546.79	612.20	677.82
17.75	21.47	25.19	28.93	32.66	36.40	40.13
4.43	6.01	7.79	9.59	11.37	13.25	15.16
22.18	27.48	32.98	38.52	44.03	49.65	55.29
50.00	50.00	50.00	50.00	50.00	50.00	50.00
5.77	7.04	8.34	9.64	10.94	12.24	13.56
250.00	250.00	250.00	250.00	250.00	250.00	250.00
32.52	40.32	48.20	56.12	64.04	72.00	80.00
348.82	426.99	506.38	586.16	665.80	746.09	826.70
12.00	13.00	13.00	13.00	13.00	13.00	13.00
29.07	32.85	38.95	45.09	51.22	57.39	63.59
377.89	459.84	545.33	631.25	717.02	803.48	890.29

TABLE 12

ESTIMATED SPACE NEEDED AND COST FOR DADE COUNTY INSTITUTION

	1972	1973	1974	1975
General Purpose Classroom	45,122	56,410	64,176	73,426
Teaching Laboratory	32,223	44,777	52,716	64,336
Library	58,595	83,035	107,475	132,000
Research Space	–	–	38,000	46,000
Office	59,885	78,800	105,850	123,830
Physical Plant	20,000	20,000	20,000	20,000
Auditorium, Theater, Museum	12,750	18,570	24,520	30,240
Student Space	42,500	61,900	87,300	100,800
Food Service	10,000	10,000	15,000	15,000
Total Net Assignable Sq. Ft.	281,075	368,572	515,037	605,632
Convert to Gross Sq. Ft. x 1.67	469,395	615,515	860,112	1,011,405
Annual Increment		146,120	244,947	151,923
Estimated Project Cost/GSF	$35	$35	$37	$38
Project Cost	16,428,825	5,114,200	9,063,039	5,773,074
Add 10% for Utilities and Site Development	1,642,882	511,420	906,304	577,307
Total Estimated Capital Outlay	18,071,707	5,625,620	9,969,343	6,350,381

TABLE 13

DADE COUNTY INSTITUTION ESTIMATED SPACE NEEDS AND FUNDING REQUIREMENTS 1972-1980

	1972	1973	1974
GROSS SQUARE FOOTAGE NEED			
Annual Increment	469,395	146,120	244,697
Accumulative Total	469,395	615,515	860,212
$ NEED FOR CAPITAL OUTLAY			
Annual Increment	$18,100,000	$5,600,000	$10,000,000
Accumulative Total	$18,100,000	$23,700,000	$33,700,000

1976	1977	1978	1979	1980	Accumulative Grand Total
86,772	100,180	113,568	127,480	140,490	
71,070	82,053	86,528	97,128	107,040	
156,725	181,530	206,345	231,250	256,250	
55,000	63,000	72,000	80,000	89,000	
146,595	164,285	186,615	207,060	225,910	
20,000	24,000	27,000	30,000	33,000	
36,150	42,090	48,030	54,000	60,000	
120,500	140,300	160,100	180,000	200,000	
20,000	20,000	25,000	25,000	30,000	
693,082	817,438	925,186	1,031,918	1,141,690	
1,157,447	1,365,121	1,545,061	1,723,303	1,906,622	
146,042	207,674	179,940	178,242	183,319	
$39	$40	$41	$42	$43	
5,695,638	8,306,960	7,377,540	7,486,184	7,882,717	
569,564	830,696	737,754	748,618	788,271	
6,265,202	9,137,656	8,115,294	8,234,802	8,670,988	$80,440,993

1975	1976	1977	1978	1979	1980
151,193	146,042	207,674	179,940	178,242	183,359
1,011,405	1,157,447	1,365,121	1,545,061	1,723,303	1,906,662
$6,400,000	$6,300,000	$9,100,000	$8,100,000	$8,200,000	$8,700,000
$40,100,000	$46,400,000	$55,500,000	$63,600,000	$71,800,000	$80,500,000

offer high student demand programs, (2) will offer its courses relatively evenly through a 14 hour period (8:00 a.m.—10:00 p.m.) five days a week, (3) will have a low research space demand, (4) will not offer extensive graduate work in the sciences, (5) will have no housing through 1980, (6) will not have an indoor physical education facility (gymnasium or fieldhouse), the space and cost estimated in Tables 12 and 13 provide a conservative picture of the capital outlay needs. Changing any of the above listed assumptions alters the projected space need. The space was generated by the standards used in the Board of Regents 1967-69 Capital Outlay Budget. Nearly 2,000,000 gross square feet of space will be needed by 1980 at an accumulative cost of over $80 million.

SITE REQUIREMENTS

Determination of the size of the site relates to many considerations other than the actual square foot area requirements. The activities of the university community, while bearing many similarities to the complex nature of the typical American city, are different in many characteristics having impact on the design and cost of the physical facilities. Typical of the differences is the fact that there is a necessity for mass movement of people in periodic intervals of short duration in which students move simultaneously from one academic area to another. The design of buildings must accommodate this activity through corridors of adequate width for horizontal circulation, and by elevators, escalators, and stairs for vertical circulation. The vertical movement of the students can be accomplished economically in buildings of three or four stories in height. For each additional story of height an increasing proportion of the construction dollar must be dedicated to facilities for vertical movement of people and to mechanical shafts which increase progressively in size for each floor added to the height.

An accepted criterion for net assignable academic area to gross area of buildings is a 60-40 ratio. As a guideline for the design of buildings this average is sometimes exceeded, sometimes not achieved. With each increase in the area of the floor space dedicated to vertical circulation and mechanical shafts, it becomes more difficult to attain a favorable ratio of net assignable area to gross area. In recognition of this, high rise academic buildings such as the Pittsburgh Tower of Learning are designed so that academic space requiring mass movement of people is restricted to the lower five stories of height. Office area and support space presenting a more limited demand upon vertical circulation are provided above that level.

For academic buildings the national average is represented by a building four stories high, with the density of land area coverage reflected in a 1:1 ratio of gross building area to ground area available. The open area between buildings provides for student circulation and for the development of the necessary services to each structure. Admittedly, averages are useful only as guidelines and reflect the extremes as well as the median or average situations. Urban as well as suburban, private as well as public institutions combine to yield these data which are used as a point of departure for projecting the land requirements for the urban university in Dade County.

The recommendations of this report necessarily relate to the economics of the construction dollar. Hence, recognizing the premium value of the land in Dade County, but simultaneously acknowledging the necessity of conserving construction funds to be made available, this recommendation contemplates a land saturation one fouth greater than the national average. High rise buildings where appropriate, such as for office or administrative purposes where mass vertical movement is not a compelling consideration, would be adjacent to or a part of academic buildings of four or five stories in height. Upon such a concept, the 1,906,000 square feet of building area estimated for 1980 would require 36 acres of campus site upon which to be constructed.

Parking of vehicles will present a considerable demand on land utilization. Not all land allocated to parking is actually available for that purpose. Arterial roads, service drives, access areas to and from parking lots, and pedestrian passages through the lots serve to reduce the net area available for parking. Therefore, while 110 cars can be parked on an acre of land, in allowance for these other demands, assumption is made that one acre of land available as gross area for parking will accommodate 75 cars. Also, an assumption is made that 50 per cent of the student, faculty and staff "head count" population of 22,000 projected by 1980 would have cars on campus. This criterion is conservative based upon experience at other State University System campuses and by comparison with Miami-Dade Junior College which, on the basis of information available to us, currently provides parking for 100 per cent of the student and faculty population. The requirement at the proposed institution would be 147 acres to provide ground level parking for 11,000 cars.

Where adequate parking area is available at ground level, available money can be concentrated on the provision of academic facilities. Where inadequate ground level parking compels the use of parking garages, the financial resources for academic area are reduced by the amount necessary to construct parking garages. Each acre of ground level parking which is replaced by multi-level parking garages will reflect a minimum expenditure of $130,000 for that construction.

Thus, reduction of ground area parking by 100 acres would impose a construction cost of $13,000,000 on the State. Any reduction of the 147 acres recommended for ground level parking would be reflected proportionally in cost to the State, or to the students, faculty, and staff if the multi-level parking facilities are to be debt-serviced from fees levied for parking privileges.

The design of parking garages becomes involved with ramps, elevators, exits and other provisions relating to the movement of cars and the regulation of their movement. For each car accommodated, these problems become more acute. Since space within the garage must be allocated for the resolution of these needs, the net area available for parking within a parking garage is proportionally less than an acre at ground level. The height of parking garages is limited by the problems attendant to the peak hour loads and the time delays related to receiving and discharging cars at that time.

Although the institution is projected primarily as a commuter institution, some provision should be made for future residence halls to serve students who live beyond the commuter area, but who elect to attend this institution. It is difficult to project this need in terms of acreage required without a projection as to the size of this segment of the student population. Areas assigned to housing do require support services such as cafeterias, laundries, counseling and recreation. An arbitrary assignment of 50 acres is recommended to be reserved for residence halls and their support services.

Athletic and recreation area requirements are projected at 30 acres based upon reported Big Ten standards for these activities, exclusive of stadia.

The total of projected needs itemized to this point equals 263 acres without any provision for expansion. Potential demands of expansion exist in new programs, increases in the actual student population in attendance, specialized areas of instruction, parking requirements, and the possibility that the above projections are an understatement of actual need. Any vision of the future must extend beyond 1980. The common principal need of urban universities is additional land. The cost of land surrounding universities is excessive and growth of urban universities has been stifled by the fact that they are landlocked. A public university, which has an obligation to accommodate the citizens who support it, must at its inception provide space upon which it can expand. A factor of 50 per cent flexibility for such expansion should be a minimum provision. The total resulting from the application of this factor is 396 acres, or, nominally, 400 acres.

All the criteria used to arrive at this calculation of acreage are conservative. To achieve the realization of these criteria will require consistent effort to that end. Construction should be achieved in significant blocks of work to permit the "high rise" concept to be accomplished. Since many of these considerations are variable and beyond the control of the planner, the recommendations represent the absolute minimum from which planning should be committed.

12 PLAN FOR ADMINISTRATION

The new state institution which will be established in Dade County could be administered in one of three ways. It could be administered as the Miami branch of Florida Atlantic University having the same role and scope as the Boca Raton campus; it could be developed as the Miami campus of Florida Atlantic University with a role and scope different from that of the Boca Raton center; or it could be administered as a separate state institution directly responsible to the Board of Regents. It is believed the latter alternative is the best administrative plan.

The new state institution to be established in Dade County will have a role and scope different from that of the Florida Atlantic University. Florida Atlantic is expanding dormitory construction, is increasingly a residential institution, and is not increasing rapidly in size. The Dade County institution will be urban, non-residential, and the most conservative estimate indicates a rapid growth. Its opening and operation will demand the full time attention of a capable administrator and a large staff. That administrator should have direct access to the Board of Regents, the Chancellor, and the staff. Relations with the community and existing junior colleges will be significant in the successful development of the new institution. Lastly, a pattern has been established whereby each new institution to open in the State University System has opened as an independent institution but as part of a total State University System.

The growth of the policy role of the Board and the establishment of a State University System budget formulated in consonance with a Comprehensive Development Plan are inconsistent with the philosophy which would make a new institution, destined to play a major role in higher education, simply a segment or subsidiary part of an existing institution. Community support would flow to an independent institution in greater strength than would otherwise be the case. For these reasons it is believed that the Dade institution should be an independent institution as the eighth university in the State University System.

Goal of the State University System

To build an unexcelled State University System of higher education. Distinguished State universities collectively will provide the citizens of Florida with educational opportunities in all disciplines at all degree levels without unnecessary or wasteful duplication or proliferation.

Baccalaureate programs of high quality in the traditional arts and sciences, teacher education and business administration will exist in all State Universities. Specialized and professional programs will be provided in designated universities through the baccalaureate, masters, doctorate and post-doctorate level. Educational opportunities will thus exist at all levels within the State University System. Programs in these latter disciplines, however, will be established only in those institutions in which such programs are a logical adjunct of existing operations and when need exists according to predetermined criteria with respect to both quality and quantity.